

**IN THE UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF TEXAS  
MARSHALL DIVISION**

TIVO INC.,

Plaintiff,

vs.

SAMSUNG ELECTRONICS CO., LTD. and  
SAMSUNG ELECTRONICS AMERICA, INC.

Defendants.

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SAMSUNG ELECTRONICS CO., LTD. and  
SAMSUNG ELECTRONICS AMERICA, INC.,

Counterclaim Plaintiffs,

vs.

TIVO INC.,

Counterclaim Defendant.

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Case No. 2:15-CV-1503-JRG

**JURY TRIAL DEMANDED**

**TIVO'S P.R. 4-5(b) RESPONSE TO SAMSUNG'S OPENING CLAIM**  
**CONSTRUCTION BRIEF**

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## I. INTRODUCTION

Pursuant to P.R. 4-5(b), Plaintiff TiVo Inc. (“TiVo”) submits this Response to Defendants Samsung Electronics Co., Ltd. and Samsung Electronics America, Inc.’s (collectively, “Samsung”) Opening Claim Construction Brief. Samsung’s Opening Brief addressed fifteen claim terms from the four Samsung patents under which Samsung has asserted counterclaims against TiVo—U.S. Patent Nos. 5,978,043 (the “’043 Patent”); 6,181,333 (the “’333 Patent”); 7,231,592 (the “’592 Patent”); and 8,233,090 (the “’090 Patent”) (collectively, the “Samsung Asserted Patents”).

Following the Court’s order of September 19, 2016 instructing the parties to narrow the disputed claim terms, TiVo agreed to remove from consideration at the *Markman* hearing nine terms from the ’592 and ’090 Patents, and thus this Response does not address those terms. TiVo proposed to remove three others from the ’043 and ’333 Patents—“customized list,” “said customized channel changer having the same configuration as said regular channel changer,” and “channel object”—but Samsung would not agree. In order to further narrow the disputed terms, however, TiVo does not oppose Samsung’s proposed constructions of these three terms.<sup>1</sup> Accordingly, only three terms from the Samsung Asserted Patents remain in dispute at this time.

As discussed in detail below, TiVo’s proposed constructions of these three terms are consistent with the claims, specification, and prosecution history of the respective patents in which they appear, and thus should be adopted.

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<sup>1</sup> TiVo does not acquiesce to the statements and arguments made by Samsung in its Opening Brief regarding the claim terms not addressed herein. TiVo reserves the right to make all arguments regarding those terms, and to seek construction of those terms, in the future should it become apparent in the context of further proceedings that additional construction is necessary.

## **II. U.S. PAT. NOS. 5,978,043 & 6,181,333**

### **A. Overview of the '043 and '333 Patents**

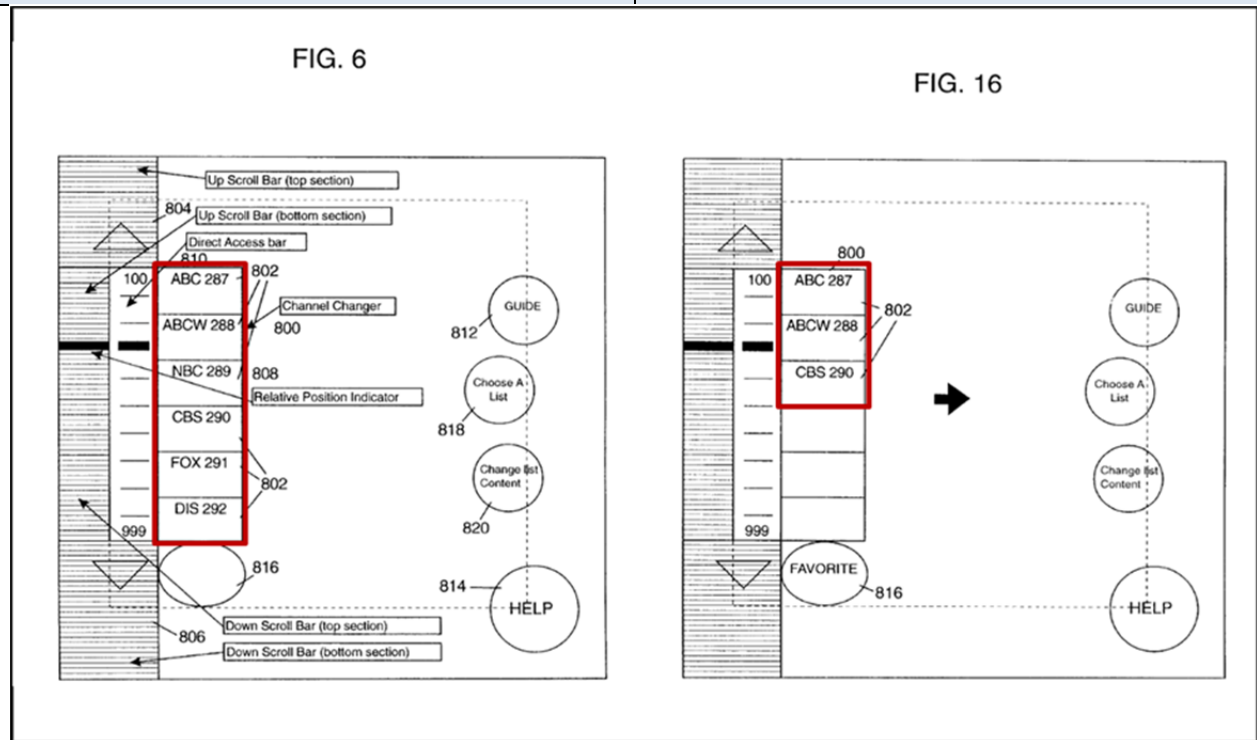
The '043 Patent issued in November 1999 and claims priority to Provisional Application No. 60/023,904 (the "'904 Application"). The patent purports to "relate[] to ... a novel TV graphical user interface (GUI) that enables users to customize lists of TV programming." '043 Pat., 1:9-12. The stated "advantages" of the claimed invention are "minimizing the number of user inputs required to create a customized list of TV channels," *id.* at 2:39-41, and "providing a TV GUI that maintains the same GUI environment for regular GUI operations and for operations with a customized list of TV channels." *Id.* at 2:42-45. TiVo contends that the claims of the '043 Patent are not patentable subject matter under 35 U.S.C. § 101. *See* Dkt. 82 (Motion for Judgment on the Pleadings that Claim 1 of U.S. Patent No. 5,978,043 and Claims 1, 2, 7, and 19 Of U.S. Patent No. 6,181,333 Do Not Claim Patent-Eligible Subject Matter and Are Invalid Under 35 U.S.C. § 101).

The only claim from the '043 Patent Samsung asserted in this case is claim 1, which recites a television system comprising:

a CPU, and

a TV monitor controlled by said CPU for displaying in first mode, a regular channel changer for enabling a user to select a TV channel among all of TV channels available in the TV system, and for displaying in a second mode, a customized channel changer for enabling the user to select a TV channel among a customized list of TV channels, said customized channel changer having the same configuration as said regular channel changer.

*Id.* at 13:28-38. The claimed "channel changer" is at the heart of the alleged invention. TiVo and Samsung agree that Figures 6 and 16 from the '043 Patent respectively depict the "channel changer" in "regular" and "customized" mode, as annotated in red below:

**Figure 6: Regular Channel Changer****Figure 16: Customized Channel Changer**

'043 Pat. Figs. 6, 16.

The '333 Patent issued in January 2001 and also claims priority to the provisional '904 Application. The patent claims the same "channel changer" described above. While the '043 Patent focused on displaying customized lists of TV channels, the '333 Patent focuses on displaying lists of TV channels sorted by number and name. Samsung asserted claims 1, 2, 7, and 19 of the '333 Patent in this case.

The parties agree that the construed meaning of "channel changer" will also apply to the following terms from the '333 Patent: "graphical channel changer," "channel selector," and "graphical channel selector." In light of the Court's September 19 order and TiVo's willingness to forgo construction at this time of certain terms advanced by Samsung, there are no terms specific to the '333 Patent presented for construction at this time. The '333 Patent and its prosecution history, however, are relevant to the construction of "channel changer" given its

shared priority with the '043 Patent. *See generally Gemalto S.A. v. HTC Corp.*, 754 F.3d 1364, 1371 (Fed. Cir. 2014) (identical language in the claims of two related patent applications given the same construction).

**1. “channel changer / “graphical channel changer” / “channel selector” / “graphical channel selector” ('043 Patent, claim 1; '333 Patent, claims 1, 2, 19)**

TiVo's Proposed Construction	Samsung's Proposed Construction
“A list of TV channels—from which a TV channel may be selected—that a user may access and navigate independent of an electronic program guide or any program specific information”	“a graphical user interface element including channel objects that allows selection of and tuning to a channel”

TiVo's construction of “channel changer” reflects the components of the channel changer described in the claims, specification, and prosecution history. These include “a list of TV channels,” “from which a TV channel may be selected,” and “that a user may access and navigate independent of an electronic program guide or any program specific information.” We address these components below:

(a) “that a user may access and navigate independent of an electronic program guide or any program specific information”

A critical aspect of the claimed “channel changer” is that the channel changer is not necessarily combined with an electronic program guide, but instead comprises a list of TV channels “that a user may access and navigate independent of an electronic program guide or any program specific information.” In fact, the patentees expressly claimed in the '904 Application to which the '043 and '333 Patents claim priority that separating the “channel changer” from an electronic program guide was the basis for the “novelty of” their alleged invention. Ex. 1 at SAM0000997. Accordingly, this aspect of TiVo's proposed construction of “channel changer” is fundamental to the '043 and '333 Patents and cannot be ignored as Samsung suggests.

Contained within the provisional '904 Application is a disclosure, dated July 1996, of components of the inventions that stemmed from that application—including the claimed “channel changer” (the “1996 Disclosure”).<sup>2</sup> *E.g.*, Ex. 1 at SAM0000997-1004. That 1996 Disclosure makes several statements relevant to the construction of this term. *See Biovail Corp. Int’l v. Andrx Pharm., Inc.*, 239 F.3d 1297, 1301 (Fed. Cir. 2001) (“When multiple patents derive from the same initial application, the prosecution history regarding a claim limitation in any patent that has issued applies with equal force to subsequently issued patents that contain the same claim limitation.”).

In particular, the 1996 Disclosure states that “[t]he state of the art for Graphical User interface for television is the Electronic Program Art. Much prior art is available showing a 2 dimensional array of items that show the channels listed vertically and the time listed in the horizontal direction.” Ex. 1 at SAM0000997. This “2 dimensional array” refers to electronic program guides that display information on television programming, *e.g.*, by channel (vertically) and time (horizontally). *See, e.g., id.* at SAM0001002 (Figure 11 showing a grid-based “Program Guide”); *see also* Ex. 2 (Decl. of Dr. Loren Terveen) at ¶ 22-23.

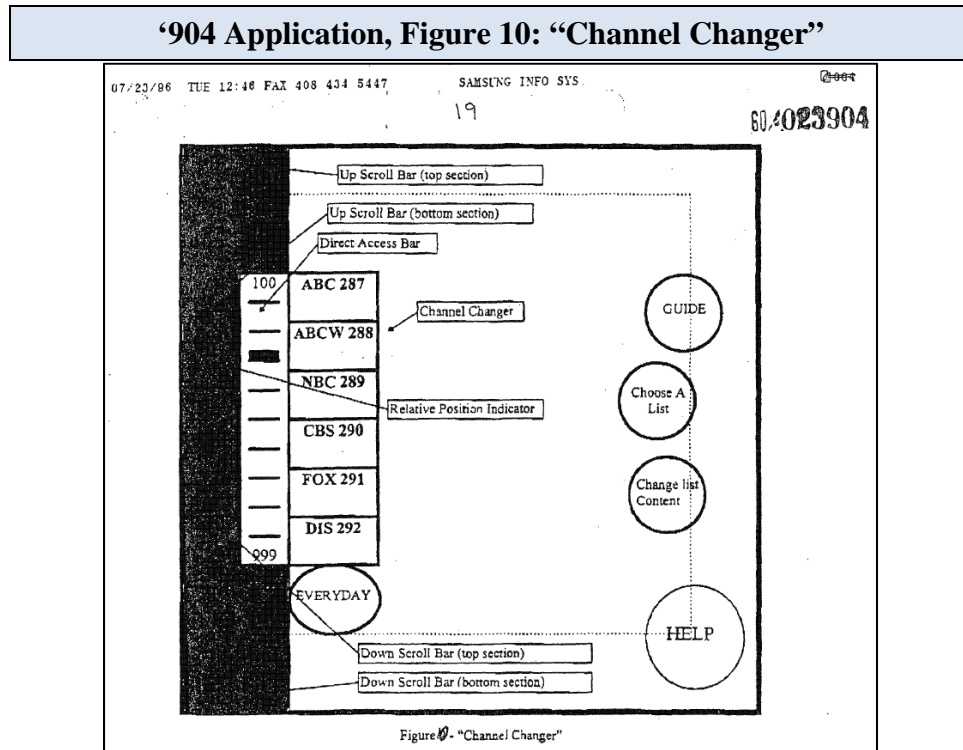
Faced with that prior art, the inventors declared that the “*novelty of [their] invention is to break the Electronic Program guide into two distinct functional modes.*” Ex. 1 at SAM0000997 (emphasis added). They further explained that “[m]ode 1 is the ‘Channel Changer’ and is shown in Figure 10.” *Id.* That Figure is depicted below, and is described by the inventors in the 1996 Disclosure as showing a display, in which “[t]he left hand side of the screen contains the list of

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<sup>2</sup> Several patents incorporating a “channel changer” derived from this provisional application, including the '043 and '333 Patents and U.S. Patent No. 6,191,781. The application for this latter patent is incorporated by reference in the '043 and '333 Patent specifications and is discussed in more detail below.



channel logos and various scroll bars, and a direct access bar for rapid movement through the list.” *Id.*



*Id.* Nowhere in the inventors’ discussion of a “channel changer” is any reference to displaying information about the television programming available on a given channel. And nowhere on Figure 10 is any depiction of program information. To the contrary, the discussion and figure relate solely to accessing and navigating a list of *channels* alone, without an accompanying display of program-specific information. *See id.*

This was by design. Where mode 1 was the “channel changer,” the inventors described mode 2 as follows:

Mode 2 is the traditional Electronic Program Guide [EPG]. However, unlike traditional systems, the EPG on the Samsung GUI ‘grows’ out of the ‘channel changer.’ By this we mean that the 2 dimensional program/time grid appears instantaneously aligned with the graphics for the channel changer...This provides a very intuitive and novel method *for the user to quickly and seamlessly go from channel changer mode to the EPG* and still maintain context.

*Id.* (emphasis added). In addition, the inventors also explained that “in order for the user to get from mode 1 to mode 2,” the user had to take action, such as clicking a button on the screen or on a remote control. *Id.*; *see also id.* at SAM0001003 (depicting flow chart whereby program guide appears only if user takes certain action).

Accordingly, the entire premise behind the “channel changer” was to create a separate list of channels that could be accessed on a display and navigated standing alone, *see* Figure 10 at Ex. 1 at SAM0000997, *or* that could serve as the basis for an electronic program guide at the user’s discretion. *See id.* at SAM0001002, Fig. 11. Therefore, although the “channel changer” *may* be included in an electronic program guide, it *must also* be capable of standing alone, such that a user may access and navigate the channel changer independent of an electronic program guide or any program specific information. *See also* Ex. 2 at ¶¶ 25-35.

The claims and specifications of the ’043 and ’333 Patents are consistent with the inventors’ intent to “break the Electronic Program guide into two distinct functional modes” and further support TiVo’s proposed construction. *Plano Encryption Techs., LLC v. Am. Bank of Tex.*, No. 2:15-cv-1273, 2016 WL 3959808, at \*3 (E.D. Tex. July 22, 2016) (Gilstrap, J.) (“The claims themselves provide substantial guidance in determining the meaning of a particular claim term.”) (citing *Phillips v. AWH Corp.*, 415 F.3d 1303, 1314 (Fed Cir. 2005)); *Phillips*, 415 F.3d at 1315 (“claims must be read in view of the specification, of which they are a part”).

For example, the claims of the ’043 Patent make no mention of an electronic program guide or any program information, as they exclusively address displaying *channel* information. *E.g.*, ’043 Pat., 13:28-38. In addition, the ’043 Patent specification repeatedly acknowledges that the “channel changer” may exist independent of an electronic program guide. *E.g.*, ’043 Pat., 6:21-31 (“[G]raphics on the TV [] screen may represent a graphical channel changer that enables

a user to select TV channels. *Another example of a graphical presentation on the TV screen* is an electronic program guide that contains names of TV programs arranged in a 2-dimensional array, in which TV channels are listed vertically, and the time of broadcasting is listed in the horizontal direction.”) (emphasis added). Discussing Figure 6, the ’043 specification repeats the same description of switching *from* “channel changer mode” *to* “program guide mode” that the inventors described in the 1996 Disclosure. *See id.* at 10:24:34 (“When the user directs the remote pointing device at a graphical button GUIDE 812, the TV GUI switches into a program guide mode to show TV programming carried by channels included in the currently selected channel list...”).

Although the ’333 Patent claims a system “for displaying a TV program guide *including* a graphical channel changer...,” ’333 Pat., 14:28-32, the patent nonetheless adheres to the same construct that the “channel changer” and the program guide are two different things that *must also be able to* exist independently. *See id.* at 10:19-21 (describing Figure 6 of the ’333 Patent and noting that “[w]hen the user directs the remote pointing device at a graphical button GUIDE 818, the graphical channel changer 800 is transformed into an electronic program guide...”); *id.* at 10:61-64 (describing Figure 7 of the ’333 Patent and noting that, “[i]n addition to the channel changer 800, the program guide 900 comprises horizontal program bars 902 that indicate TV programs carried by TV channels during a predetermined time period”) (emphasis added); *id.* at 11:18-32 (“Thus, the program guide 900 is formed out of the graphical channel changer 800 when the TV GUI switches from the channel changer mode into the program guide mode.”).

Moreover, Figure 6 in both the ’043 and ’333 Patents depict the same “channel changer” as shown in Figure 10 from the 1996 Disclosure, and neither depicts any programming information.

TiVo's proposed construction is also reinforced by the incorporation by reference into both of the '043 and '333 Patents' specifications of another application stemming from the '904 Application. '043 Pat., 10:28-34 (incorporating by reference U.S. application Ser. No. 08/720,500, entitled "TELEVISION GRAPHICAL USER INTERFACE THAT COMBINES ELECTRONIC PROGRAM GUIDE WITH GRAPHICAL CHANNEL CHANGER," filed Sep. 30, 1996); '333 Pat., 11:32-37 (same). That application issued as U.S. Patent. No. 6,191,781 (the "'781 Patent"), which expressly claims a "channel changer" that transitions to an electronic program guide. *E.g.*, Ex. 3 ('781 Patent) at 12:53-13:3.

The '781 Patent again reflects the inventors' 1996 Disclosure and the consistent language in the '043 and '333 Patent specifications discussed above. *E.g.*, *id.* at 8: 54-65 ("The GUI displayed on the TV screen may operate in two distinct functional modes. *Mode 1 that enables a user to select a TV channel is represented by a graphical channel changer* displayed on the screen. In addition to providing the user with TV channel selection capabilities, *the graphical channel changer offers a gateway to mode 2 that enables the user to select TV programs carried by various TV channels.*") (emphasis added); 10:1-11 ("The graphical channel changer 800 allows the user to include any combination of TV channels into a channel list to be displayed....When the user directs the remote pointing device at a graphical button GUIDE 818, *the graphical channel changer 800 is transformed into the electronic program guide*, as discussed in more detail later.") (emphasis added).

Therefore, in the '781 Patent, as in the '043 and '333 Patents, the "channel changer" *must* be able to exist independently of an electronic program guide—else the claimed *transition from* the channel changer *to* an electronic program guide cannot take place. The term must be construed the same way here. *Gemalto*, 754 F.3d at 1371 (identical language in the claims of two

related patent applications given the same construction); *see also Microsoft Corp. v. Multi-Tech Sys., Inc.*, 357 F.3d 1340, 1349 (Fed. Cir. 2004) (“[T]he prosecution history of one patent is relevant to an understanding of the scope of a common term in a second patent stemming from the same parent application.”).

(b) “a list of TV channels”

The phrase “list of TV channels” is intended to reflect language used consistently throughout the claims, specification, and prosecution history to describe the “channel changer.” Samsung has proposed the ambiguous phrase “graphical user interface element,” which arguably is unbounded and does not add any clarity to the claim.

First, TiVo’s proposed construction is supported by the claims themselves. *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996) (“First, we look to the words of the claims themselves, both asserted and nonasserted, to define the scope of the patented invention.”). “While certain terms may be at the center of the claim construction debate, the context of the surrounding words of the claim also must be considered in determining the ordinary and customary meaning of those terms.” *ACTV, Inc. v. Walt Disney Co.*, 346 F.3d 1082, 1088 (Fed. Cir. 2003).

Here, in addition to being accessible independent of an programming information, as discussed above, the language and context of the claims confirms that a “channel changer” should be construed as reflecting a displayed “list of TV channels.” For example, claim 1 of the ’043 Patent recites “displaying in first mode, a *regular* channel changer for enabling a user to select a TV channel among all of TV channels available in the TV system, and for displaying in a second mode, a *customized* channel changer...” *Id.* at 13:28-34 (emphasis added). The claim further recites displaying the “customized channel changer for enabling the user to select a TV channel *among a customized list of the TV channels*, said customized channel changer having the

*same configuration* as said regular channel changer.” ’043 Pat., 13:34-38 (emphasis added). Accordingly, the purpose of the “customized channel changer” is to present the user with a customized *list* of TV channels. Because the customized channel changer presents a list of TV channels, the regular channel changer—which must have the “same configuration”—must also present a list of TV channels. *See, e.g., Rexnord Corp. v. Laitram Corp.*, 274 F.3d 1336, 1342 (Fed. Cir. 2001) (“[A] claim term should be construed consistently with its appearance in other places in the same claim or in other claims of the same patent.”). Indeed, the *only* difference between a “regular channel changer” and a “customized channel changer” is that the latter contemplates a *customized* list instead of a *complete* list of available channels.

Second, the specification also describes the channel changer as a list of TV channels. For example, Figures 6 and 16 depict the “regular channel changer” and “customized channel changer” with vertical lists of TV channels. *See* Figs. 6 & 16, *supra* at 3. Samsung agrees that these figures show the same “channel changer” in regular and customized mode, and Samsung’s Opening Brief explains how the “regular” channel changer shown in Figure 6 “initially displays all TV channels” while the “customized” channel changer shown in Figure 16 displays a customized “list of TV channels.” Br. at 2. As noted above, they are *both lists of channels*, one is simply customized.

Samsung also quotes the specification requiring that “‘the position, configuration, and operations’ of the channel changer remains unchanged, regardless of whether all TV channels or only a customized list of TV channels is shown.” *Id.* (citing ’043 Pat. at 12:59-64). Accordingly, if the “customized channel changer” is defined as a “list of TV channels,”—as the patent states and Samsung concedes—it would be nonsensical and contrary to the patent’s teaching for the term “channel changer” to be defined differently. *See also* ’043 Pat., 9:23-26 (describing Figure

6 as showing “the TV GUI of the present invention in a regular channel changer mode that enables users to select a required TV channel among about 1000 channels provided by the satellite receiver”); *id.* at 12:65-13:1 (“The TV GUI enables users to create customized channel lists.”).

Third, the prosecution history reinforces that the “channel changer” as conceived and claimed by the inventors is a “list of TV channels.” *See generally Plano*, 2016 WL 3959808, at \*3 (“The prosecution history is another tool to supply the proper context for claim construction because a patent applicant may also define a term in prosecuting the patent.”). For example, in the 1996 Disclosure discussed above, the inventors described the “channel changer ... shown in Figure 10” as a “list of channel” logos. And, as noted, the “channel changer” in Figure 10 from the 1996 Disclosure is *identical* to that in Figure 6 from the ’043 Patent and Figure 6 from the ’333 Patent. *See Ex. 1 at SAM0000999.*

From the very beginning of the inventors’ alleged invention, therefore, the “channel changer” has been described, depicted, and defined as a list of TV channels. The Court should adopt that definition as well. *E.g., Jack Guttman, Inc. v. Kopykake Enters., Inc.*, 302 F.3d 1352, 1360 (Fed. Cir. 2002) (“It is black letter law that a patentee can choose to be his or her own lexicographer ... Where, as here, the patentee has clearly defined a claim term, that definition usually ... is dispositive; it is the single best guide to the meaning of a disputed term.”) (quotations omitted).

(c) “from which a TV channel may be selected”

Samsung’s Opening Brief incorrectly states that TiVo’s construction “ignores the critical feature that the channel changer allows selection of and tuning to a channel.” Br. at 8. Although TiVo does not agree that this is a “critical feature” of the claimed invention—the specification concedes that prior art user interfaces enabled the selection of channels (*e.g.*, ’043 Pat., 1:18-

20)—TiVo does not dispute that the claimed “channel changer” enables “a user to select a TV channel” from the lists of channels available. *E.g., id.* at 13:30-36. That is what the claim recites. Accordingly, TiVo’s proposed construction specifically contemplates that the list of TV channels that constitutes the channel changer is a list “from which a TV channel may be selected.” Samsung’s argument does not present a material dispute in the term’s construction, as both parties’ constructions reflect that the “channel changer” allows the selection of a TV channel. However, TiVo’s construction more accurately reflects the language of the claim, which only uses the word “select” as opposed to also including the superfluous word “tuning.”

(d) Samsung’s Proposed Construction Is Flawed And Inconsistent With the Intrinsic Record

Samsung proposes a construction of “a graphical user interface element including channel objects that allows selection of and tuning to a channel.” That construction is flawed for several reasons.

First, Samsung’s construction essentially strips the claim term of meaning. Samsung’s use of “graphic user interface element” renders the claim impossibly ambiguous. Samsung apparently contends that the claim term can include any GUI element, irrespective of design, layout, or other functionality. Construing “channel changer” as Samsung proposes does not make the claim easier to understand. *E.g., Tessenderlo Kerley, Inc. v. Or-Cal, Inc.*, No. C 11-04100 WHA, 2012 WL 3116059, at \*2 (N.D. Cal. July 26, 2012) (rejecting a proposed construction because “[a] purpose of claim construction is to remove ambiguity” and “construing the term [as defendant suggested] would add ambiguity.”). Similarly, Samsung’s expansive construction threatens to significantly enlarge the scope of the claims to include any “graphical user interface element” displayed on the TV screen. That is not what the inventors’ intended or claimed, as evidenced by their acknowledgement in the 1996 Disclosure that the “state of the art for



Graphical User Interface[s] for television” already contained “much prior art” showing electronic program guides. Ex. 1 at SAM0000997; *see also, e.g.*, ’043 Pat. at 2:13-17. Samsung does not and cannot claim to have invented the electronic program guide or every “graphical user interface element” related to the display and selection of television channels. Accordingly, the term should not be construed as Samsung suggests. *E.g., Phillips*, 415 F.3d at 1312 (“Because the patentee is required to define precisely what his invention is ... it is unjust to the public, as well as an evasion of the law, to construe it in a manner different from the plain import of its terms.”) (quotations omitted).

Samsung incorrectly accuses TiVo’s construction of “stripping” the “graphical user interface context from” the term “channel changer.” Br. at 8. TiVo does not deny that the list of TV channels that is the “channel changer” exists in a graphical display on a television screen. But that does not demand construing the term to mean “a graphical user interface element...,” thus rendering the term redundant as well as ambiguous and overbroad.

Second, with respect to the proposed requirement that a “channel changer” include “channel objects,” Samsung’s proposed construction violates basic tenets of claim construction. For example, independent claim 1 makes no reference to “channel object.” ’043 Pat., 13:28-38. However, dependent claim 2 (which Samsung has not asserted in this case) recites the “system of claim 1, wherein said regular and customized channel changers comprise channel objects for enabling the user to switch the TV channels by directing a remote pointing device at said channel objects.” *Id.* at 39-42. The presence of the dependent claim adding this “particular limitation gives rise to a presumption that the limitation in question is not present in the independent claim.” *Phillips*, 415 F.3d at 1315. Samsung has not articulated any reason why that presumption should not apply. In addition, Samsung argues that the ’333 Patent claims a “channel changer

having channel objects,” Br. at 8, but this does not mean that the “channel changer” *necessarily* includes channel objects, as evidenced by claim 1 of the ’043 Patent.

Third, Samsung attempts to avoid the fact that a “channel changer” must be able to exist independently of an electronic program guide by improperly conflating and confusing the terms “electronic programming guide” and “graphical user interface” and by misstating TiVo’s position. Indeed, Samsung argues that a person of ordinary skill in the art would understand an “electronic program guide” to include a graphical user interface that does not display any information about television *programs*. Br. at 10. That is incorrect. Ex. 2 at ¶¶ 22-23. In addition, Samsung incorrectly argues that “TiVo’s construction misleads by suggesting that a channel changer may exist independently of a graphical user interface of a television system,” which Samsung contends would be “nonsensical.” Br. at 10.

TiVo does *not* suggest that the “channel changer” may exist independently of every “*graphical user interface* of a television system.” Rather, TiVo acknowledges that the claimed “channel changer” is intended to be part of such a graphical user interface. But simply because a “channel changer” is part of a graphical user interface does not mean that it is also necessarily part of an “*electronic program guide*.” Ex. 2 at ¶¶ 24-35. Indeed, not every user interface is a program guide, and the two terms are not synonymous. *Id.* at ¶¶ 22, 24. Therefore, consistent with the foregoing discussion of the claims, specifications, and prosecution history, a person of ordinary skill in the art would construe the term “channel changer” as “a list of TV channels—from which a TV channel may be selected—that a user may access and navigate independent of an electronic program guide or any program specific information.” *Id.* at ¶ 35.

### **III. U.S. PAT. NO. 7,231,592**

Samsung has also asserted claims from two other patents in this case, the '592 and '090 Patents. Those two patents are not related to the user interface patents discussed above or to each other. Following the Court's order of September 19, 2016 instructing the parties to narrow the disputed claim terms, TiVo and Samsung have agreed to remove all disputed terms from the '090 Patent from consideration at the *Markman* hearing. Accordingly, the '090 Patent is not discussed herein.<sup>3</sup>

#### **A. Overview of the '592 Patent**

The '592 Patent purports to address a need to detect, command, and control any device connected to a home network. Noting the proliferation of "home devices," such as TVs, VCRs, stereo equipment, appliances, and lighting systems, '592 Pat., 1:28-52, the patent identifies alleged "drawbacks" to using remote controls to control such devices. For example, the patent notes that "a particular remote control unit can only control and command those home devices for which it includes the necessary control and command logic." *Id.* at 1:62-65. In addition, "as new home devices are developed, the remote control unit will not" necessarily be able to "control and command the new home devices..." *Id.* at 2:2-7. Moreover, when devices are available to communicate on a network, the patent identifies a need "to be able to identify the devices which are currently connected to, and active on, the network." *Id.* at 2:9-12. To address these alleged issues, the '592 Patent attempts to resolve the following:

- "a need for a method of detecting, identifying and creating links to the devices currently connected to the network;"

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<sup>3</sup> As noted previously, TiVo reserves all rights to construe any term as needed at a future stage of litigation.

- “a need for a mechanism that provides for dynamically updating the devices detected as connected to the network; and
- a need “for rendering a user interface to enable user control and command of any device that is currently connected to the network.”

*Id.* at 2:13-19. There are currently two terms from the '592 Patent presented for construction at the *Markman* hearing: “home device” and “capable of displaying a user interface.” Each term is discussed below.

**1. “home device” ('592 Patent, claims 1, 2, 4-7, 12, 13, 17-19)**

TiVo's Proposed Construction	Samsung's Proposed Construction
“Electronic devices that are typically found in the home, with the exception of general purpose computers (i.e. personal computers (PCs), laptop computers, etc.)”	“a controllable device typically found in the home, other than a general purpose computer (i.e. personal computer or laptop)”

TiVo's proposed construction recites the patentees' own definition of “home device” and should be adopted. As the Federal Circuit has repeatedly stated, a patent specification “may reveal a special definition given to a claim term by the patentee that differs from the meaning it would otherwise possess. In such cases, the inventor's lexicography governs.” *Phillips*, 415 F.3d at 1316. Here, the patentees chose to define the term “home device” as follows:

As used in this document, the term “home device” encompasses all electronic devices that are typically found in the home, with the exception of general purpose computers (i.e. personal computers (PCs), laptop computers, etc).

'592 Pat., 1:28-32 (emphasis added). The underlined portion is TiVo's proposed construction, word-for word. Accordingly, because the patentee defined the term in this manner, that is the definition the Court should adopt. *E.g., Jack Guttman*, 302 F.3d at 1360 (Fed. Cir. 2002) (“It is black letter law that a patentee can choose to be his or her own lexicographer ... Where, as here,

the patentee has clearly defined a claim term, that definition usually ... is dispositive; it is the single best guide to the meaning of a disputed term.”).<sup>4</sup>

Samsung attempts to inject into the patentees’ stated definition the notion that “a ‘home device,’ as claimed in the ’592 Patent, must be ‘controllable.’” Br. at 14.<sup>5</sup> In support of this argument, Samsung refers to a statement in the specification regarding an overarching purpose of the invention, *i.e.*, the inventors’ allegation that there was “a need for a mechanism that provides for dynamically updating the devices detected as connected to the network, and for rendering a user interface to enable user control and command of any device that is currently connected to the network.” ’592 Pat., 2:15-19. TiVo agrees that the ’592 patent was intended to enable “control and command of any device that is currently connected to” a home network, but that does not mean that the inventors’ own definition of a “home device” should be modified ex-post to require each claimed home device to be “controllable.”

In fact, the claims themselves make clear that, while home devices *may* be controllable, it

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<sup>4</sup> Samsung attempts to downplay the importance of the definition set forth in the specification by characterizing it as a “disclosure” used in the “context of the patent’s ‘related Art.’” Br. at 14. However, during the prosecution history, the inventors unambiguously pointed the Patent Examiner to the identical portion of the submitted specification and noted that this portion was “where home devices, and a home network, according to the present invention *are defined*.” Ex. 4 at SAM0000242.

<sup>5</sup> In its opening brief, Samsung changed its proposed construction to remove the word “networked.” TiVo agrees that the word “networked” should not be included in the Court’s construction, but disagrees with the premise behind Samsung’s explanation for why it removed that word. Specifically, Samsung notes that it “dropped the ‘networked’ requirement from its proposed construction given the plain claim language already recites that home devices are connected to the network.” Br. at 13 n.1. That is not an accurate characterization of the claim language, which, for example, explicitly requires the act of “*connecting* a first home device to the home network” and “*connecting* a second home device to the home network....” ’592 Pat., 24:51-52 (emphasis added). That is, while “home devices” may be *capable* of being “networked,” they are not by definition “networked” *ab initio*. This issue does not require resolution at this time, but TiVo does not agree with Samsung’s position and reserves all of its rights to contest that position at the appropriate time.

is not true that they *must* be controllable. For example, as Samsung acknowledges, the method of claim 1 requires a first home device and a second home device to be connected to a home network and, *inter alia*, that the second home device “is capable of being controlled by said first home device.” *Id.* at 24:51-54. There is no requirement that the first home device also be “capable of being controlled.” *See id.* Moreover, dependent claim 4 makes clear that the first home device of claim 1 is *not* required to be controllable, as it recites the “method of claim 2 [which depends from claim 1], wherein the first home device is capable of being controlled by another home device to perform a function.” *Id.* at 25:3-5. The presence of the dependent claim adding this “particular limitation gives rise to a presumption that the limitation in question is not present in the independent claim.” *Phillips*, 415 F.3d at 1315. Samsung has not articulated any reason why that presumption should not apply.

In addition, Samsung’s construction is not faithful to the patentees’ lexicography and should not be adopted because it purposefully changes the patentees’ explicit language and enlarges the scope of the claims. For example, the second clause in the patentees’ definition *excludes* “general purpose computers (i.e. personal computers (PCs), laptop computers, etc)” from the term “home device.” ’592 Pat., 1:31-32. Samsung’s proposed construction misstates this exclusionary language, lifted verbatim from the ’592 Patent, in two ways. First, the patent uses the plural “general purpose computers,” but Samsung’s proposal only excludes the singular “a general purpose computer.” Perhaps Samsung intends to argue that only a limited type of computer should be excluded from the definition, but that is not how the patentees chose to define the term. The exclusionary language should accurately reflect the plural noun “computers” used in the patent itself.

Second, in the parenthetical that concludes the definition, the patentees specified that

multiple types of “general purpose computers” should be excluded from the term “home device”: “(i.e. personal computers (PCs), laptop computers, *etc.*)” ‘592 Pat., 1:28-32 (emphasis added). In this parenthetical, the patent specifically includes the abbreviated term “etcetera,” thereby indicating that a “personal computer (PC)” and a “laptop computer” were not the only “general purpose computers” excluded from the term “home device.” *E.g., CA, Inc. v. Simple.com, Inc.*, No. 02-cv-2748, 2009 U.S. Dist. LEXIS 25241, at \*36 (E.D.N.Y. Mar. 5, 2009) (“The use of the term ‘etc.’ is noteworthy because it indicates that the patentees’ list was not meant to be exhaustive.”).

Samsung’s proposed construction ignores this express language by limiting the excluded devices to “a general purpose computer (i.e. personal computer or laptop).” Samsung’s proposed construction thus purposefully omits the abbreviated “etcetera,” which narrows the exclusion and, as a result, impermissibly *expands* the scope of the term “home device” and the scope of the claims. But it is black letter law that Samsung cannot expand its claimed invention ex-post by revising the express language of the specification. *See Phillips*, 415 F.3d at 1316. (“In light of the statutory directive that the inventor provide a ‘full’ and ‘exact’ description of the claimed invention, the specification necessarily informs the proper construction of the claims.”). To the contrary, here the inventors specifically *disavowed* that the claimed “home device” would include “general purpose computers (i.e. personal computers (PCs), laptop computers, etc),” and that disavowal cannot be changed now. *See also Phillips*, 415 F.3d at 1316 (“[T]he specification may reveal an intentional disclaimer, or disavowal, of claim scope by the inventor. In that instance ... the inventor has dictated the correct claim scope, and the inventor’s intention, as expressed in the specification, is regarded as dispositive”).

2. **“capable of displaying a user interface” (’592 Patent, claim 1)**

TiVo’s Proposed Construction	Samsung’s Proposed Construction
“Possessing its own display capability, i.e., comprising a screen for displaying <del>HTML</del> <u>pages content to a user</u> ”	No construction necessary.

The term “capable of displaying a user interface” requires construction. In response to Samsung’s Opening Brief, TiVo has revised its proposed construction to eliminate the requirement that the screen display “HTML pages,” and instead to simply require that the screen display “content to a user.” TiVo’s proposed construction is consistent with the claims, specification, and prosecution history of the ’592 Patent and should be adopted.

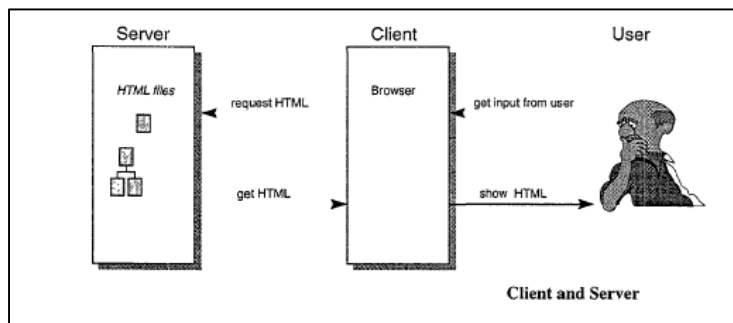
The parties’ dispute regarding the construction of this term centers on whether, to be “capable of displaying a user interface,” a device must possess a screen that itself displays content to the user or whether a device must only be capable of sending data to a different device to be displayed. TiVo respectfully submits that the former interpretation is consistent with the plain meaning of “capable of displaying” and thus should be adopted. Samsung seizes on *one sentence* from an embodiment discussed in the specification suggesting that a Digital VCR is capable of “displaying *video*” as proof that its position is correct. But Samsung ignores the balance of the specification and the prosecution history, each of which consistently describes devices as capable of displaying *a user interface* only when they possess screens of their own.

Samsung’s U.S. Patent Application No. 60/059,449—to which the ’592 Patent claims priority—highlights the distinction between a device “capable of displaying a user interface” and one that can send data to be displayed by a second device. *See* Green Decl., Ex. D (Dkt. No. 177-5). In that application, the inventors explained certain aspects of their alleged invention, including a general architecture based on an internet “client and server model.” *Id.* at 35 of 78. As background, the inventors explained that “[each] device that provides an additional service to



the ... network is called ‘Server.’ And the device that provides display and user interface to consumer is called ‘Client.’ Consumer interacts with the client device but services are provided through web pages in the server.” *Id.* The inventors then applied this model to their proposal to “transfer Graphic User Interface[s] between devices in [a] home network,” by proposing that “all sources of GUI information ... reside in the server device” while the “client device”—which the inventors also described with the parenthetical “(user interface to consumer)” — “shows all the functions that the server to which it is accessing can serve.” *Id.* A few pages later, the inventors elaborated on this model:

There are normally two types of systems: Client and Server. A device which provides a service or functionality to users and provides its control method in HTML form is called “server”. A device which accesses the server HTML page, *shows the content to users* and transfers the response information from users is called “client”. Internet DTV is a good example of client device. DVCR and DBS set top box are examples of servers. The following diagram shows the concept of server and client.



*Id.* at 39 of 78 (emphasis added). Notably, the inventors then listed as a “Requirement” for a “Client Display Device” that the device be “Display Capable.” *Id.* at 40 of 78. Although the inventors contemplated that “Server Devices” would contain data such as an HTML GUI to be displayed, they did not contemplate that such devices would also be “display capable.” *Id.* at 40-41 of 78. Accordingly, in the priority application to the ’592 Patent, the inventors themselves understood that a device would be “display capable” *only* if the device could itself display the interface to the user, and not simply because the device could send data to be displayed on a

different device. *See id.* Indeed, the inventors used the same example Samsung now uses, a Digital VCR, as an example of a server device that was *not* “display capable.” *Id.* at 40-42 of 78.

This same model is reflected in the ’592 Patent specification. In particular, the specification notes that, in the contemplated home network depicted in Figure 1 of the ’592 Patent, “[t]he browser based DTV 102 (acting as a client), receives and interprets the HTML files associated with the home devices (acting as servers) and graphically displays the respective control and command information *on its viewable display.*” ’592 Pat., 6:49-53 (emphasis added). Also describing that same TV, the specification further provides that “[u]nlike most other home devices that are typically connected to a home network, the DTV 102 can provide the human interface for the home network 100 *as it comprises a screen for displaying HTML pages.* However other home devices having a display capability may be used to provide the human interface.” *Id.* at 5:63-6:1 (emphasis added). In addition, the specification concludes its description of the invention by noting that, “[i]n accordance with the described invention, control of a plurality of devices (for example, a VCR, a CD player, a DVD player or any other device) is implemented with the aid of a single control loop, established *from a video display of a client device (such as a TV or a PC) to a user...*” *Id.* at 23:60-64 (emphasis added). In each of these statements, therefore, the patentees expressed a consistent intent—as reflected in the prosecution history—to limit devices “displaying user interfaces” to devices that themselves possessed a screen on which to actually display that content. As a result, it would be consistent with the specification and the prosecution history to construe the term “capable of displaying a user interface” as TiVo proposes.

Arguments made by the patentees to the Patent Office further undermine Samsung’s position. *E.g., Phillips*, 415 F.3d at 1317 (“[T]he prosecution history can often inform the

meaning of the claim language by demonstrating how the inventor understood the invention and whether the inventor limited the invention in the course of prosecution, making the claim scope narrower than it would otherwise be.”). Specifically, the Examiner initially rejected the claims in light of a reference entitled Suzuki, T. et al., *Teleoperation of multiple robots through the Internet*, 5th IEEE International Workshop on Robot and Human Communication, November 11-14, 1996, in view of Fisher, Susan E., *Get Ready for Plug and Play*, Datamation, May 1, 1996, pages 62-64. Ex. 4 at SAM0000241. Suzuki is attached as Exhibit 5 hereto, and describes, *inter alia*, how robots can send data—including images—to be viewed by a user on another device with a screen, such as a computer. *E.g.*, Ex. 5 at 84-87, & Figs. 1-4. In response, the patentees acknowledged that the robots described in Suzuki could send information to be displayed to users through network based communications, Ex. 4 at SAM0000242-243, but nonetheless argued that Suzuki “does not disclose that a robot displays a user interface for receiving user input.” *Id.* at SAM0000243. On this basis, the patentees argued that Suzuki did not disclose “a home device that is capable of displaying a user interface.” *Id.* at SAM0000241. Having taken the position in prosecution that a device that can send data *to be displayed* but does not itself *display data* does not meet that limitation, Samsung cannot argue the contrary now.

#### IV. CONCLUSION

For the foregoing reasons, TiVo respectfully requests that the Court adopt its proposed constructions of the three disputed claim terms from the Samsung Asserted Patents.

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Respectfully submitted,

/s/ Josh B. Gordon

Josh B. Gordon

**MCKOOL SMITH PC**

Sam Baxter, Lead Attorney

Texas State Bar No. 01938000  
sbaxter@mckoolsmith.com  
McKool Smith  
300 Crescent Court, Suite 1500  
Dallas, Texas 75201  
Telephone: (214) 978-4016  
Facsimile: (214) 978-4044

**IRELL & MANELLA LLP**

Morgan Chu  
mchu@irell.com  
Andrei Iancu  
aiancu@irell.com  
Richard M. Birnholz  
rbirnholz@irell.com  
Thomas C. Werner  
twerner@irell.com  
1800 Avenue of the Stars, Suite 900  
Los Angeles, California 90067  
Telephone: (310) 277-1010  
Facsimile: (310) 203-7199

Attorneys for Plaintiff TiVo Inc.

**CERTIFICATE OF SERVICE**

I hereby certify that all counsel of record who have consented to electronic service are being served with a copy of this document via the Court's CM/ECF system per Local Rule CV-5(a)(3) on this 26th day of September, 2016.

/s/ Josh B. Gordon  
Josh B. Gordon